



PATENT ABSTRACTS OF JAPAN

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H03M 7/30**G10L 9/18****H04N 7/24****H04N 7/30****H04N 7/32**(21) Application number: **06081534**(22) Date of filing: **20.04.94**(71) Applicant: **MATSUSHITA ELECTRIC IND CO LTD**(72) Inventor: **EITO MINORU**(54) **VECTOR QUANTIZATION CODING/DECODING DEVICE**

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(57) Abstract:

PURPOSE: To divide an input pattern into a vector quantization index and its differential signal to effectively transmit and record them and to sequentially optimize a vector quantization code book.

CONSTITUTION: A minimum distortion vector deciding part 101 outputs a key vector y_m , i.e., the minimum square error in y_i contained in a code 'book to an input 64-dimensional vector (x) and also outputs an index (m) of the key vector. Then the part 101 quantizes the difference vector (d) calculated by a subtractor 1-3 as $d=x-y_m$ through a quantizing part 104 and outputs the quantized vector (d) together with the index data. Then a difference vector d' is calculated at an adverse quantizing part 106, and a code book changing part 107 changes the vector y_m based on the vector d' so as to approximate it to the vector (x). Meanwhile the vector y_m is changed also at the decoding side synchronously with the coding side.

